

Q Draw a Flowchart to print the first 5 multiples of 11.

11 22 33 44 55

$$\text{num} = \underline{\underline{1}} - \underline{\underline{5}}$$

$$\text{num} * 11$$

$$\begin{aligned} 1 \times 11 &= 11 \\ 2 \times 11 &= 22 \\ 3 \times 11 &= \\ 4 \times 11 &= \\ 5 \times 11 &= \end{aligned}$$

11  
22  
33  
44  
55

$$\text{num} < 6$$

$$\text{num} = 1$$

$$\begin{aligned} ( &\times 11 ) \\ \text{num} &= \text{num} + 1 \end{aligned}$$

Start

$$\begin{aligned} \text{num} &= \underline{\underline{1}} \\ &= 3 \\ \text{num} &= 7 \\ \text{num} &= 6 \end{aligned}$$

Stop

No  
False

$$\text{num} = \underline{\underline{1}}$$

Is  
 $\text{num} < 6$

Yes  
True

Print  
 $(\text{num} * 11)$

$\underline{\underline{=}}$

$a = \underline{\underline{1}}$

$$\text{num} = \text{num} + 1$$

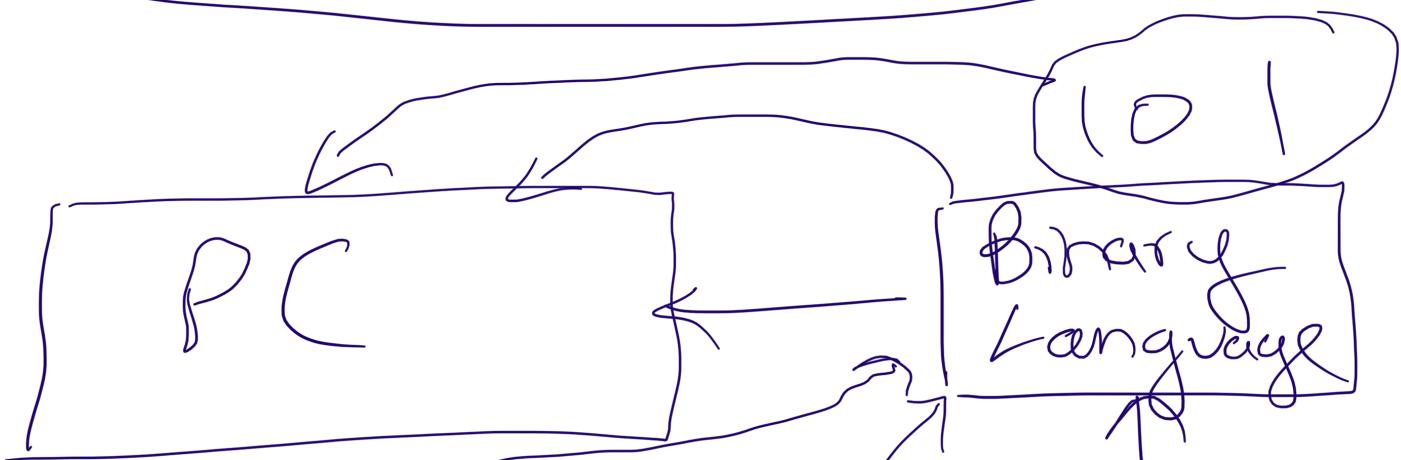
$a = \underline{\underline{=}}$

$a = \underline{\underline{=}}$

$a = \underline{\underline{1}}$

English = Grammatical Rules

Python = Syntax



$$a + b$$

5

$$\begin{aligned} a &= 2 \\ b &= 3 \end{aligned}$$

Binary Language

Program Lang

Human

Output : 5

3

4, 5

Integers

3.5

3.5 2.3

-2.3

-1.1 -5.5

Float

a

b

e

d

characters

a

'a'

Up grad → " Up grad"  
single or double quotes

" Up grad "

Yes → True

No → False



Boolean  
Data  
Types

1. Integer Ex. 3, 4, -1, -5, -6

2. Float = 3.5, -1.5, -1.3, -1.775

3. String = " Up grad ", " Interpret ",

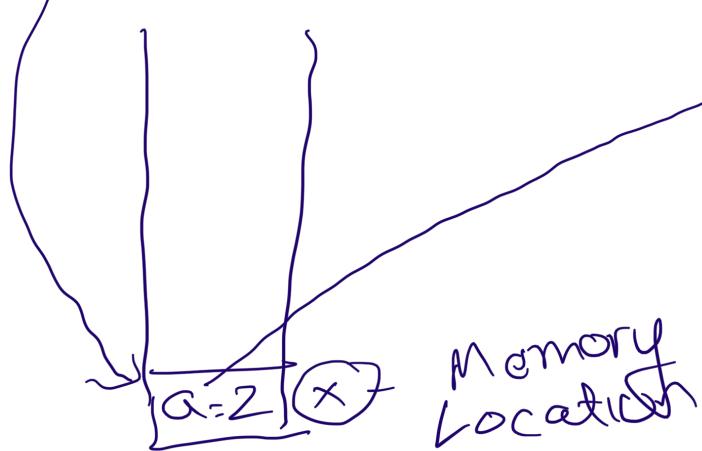
4. Boolean = True or False

Name = " Interpret "

a = 2

a = 2

a = 2

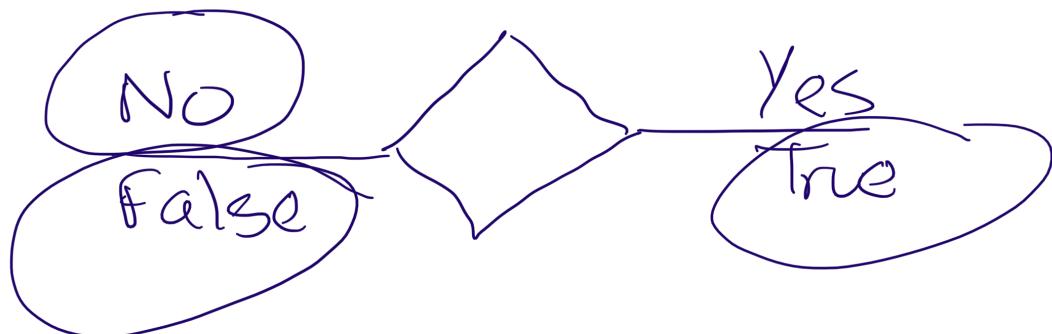


## Boolean

21 Feb = True  
19 Feb = False

$$\boxed{a = 1} \\ \boxed{a = 3} \\ \boxed{1 = 3}$$

False  
Boolean  
Data Type



Name = ("Interpreter", "Text",  
        "")  
      Name  
      String  
[ My name is Interpreter ]

Boolean = True or False

Sets = [and, or, not]

[Coffee or Tea]

[Coffee and Tea]

not True = False

not False = True

Yes = True 1

No = False 0 1x0

True and False

1. 0 = 0

True or False = True = 1

not True = 0

{True or False} 1 1  
True False

not False = True  
is  $(a > 3)$  and  $(a > 7)$   
~~a = 1~~ / 0

True and True = T

is  $(a > 3)$  or  $(a > 2)$

$a = 2.5$

(F or T) = T

For loop



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```
print(1)
print(2)
print(3)
i
```

i to 10

| (10)

$a = 5$

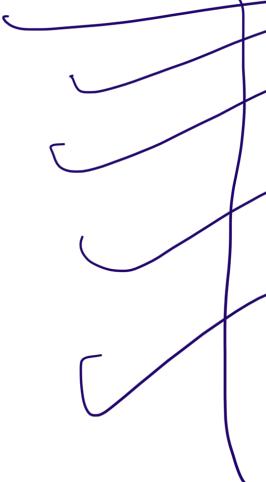
False

$a = 3$

$\text{not } \text{True} = \text{False}$

$\text{not } (a > 3) = \text{False}$

$a = 5$

- 
 1. Boil the kettle  
 2. Add Sugar & Coffee  
 3. Add Milk  
 4. Boil 5 min  
 Coffee

[ if ( Ravi Tops I will give him chocolate ) ]

[ else if Ravi will take extra classes ]

else : { Someone else will get the chocolate }

{ Ravi = }

$$3 \div 2 = 1 \quad 2 \overline{) \begin{array}{r} 3 \\ 2 \end{array}}$$

$$4 \div 2 =$$

$$2 \overline{) \begin{array}{r} 4 \\ 4 \\ \hline x \end{array}}$$

$$\boxed{30 = 5}$$

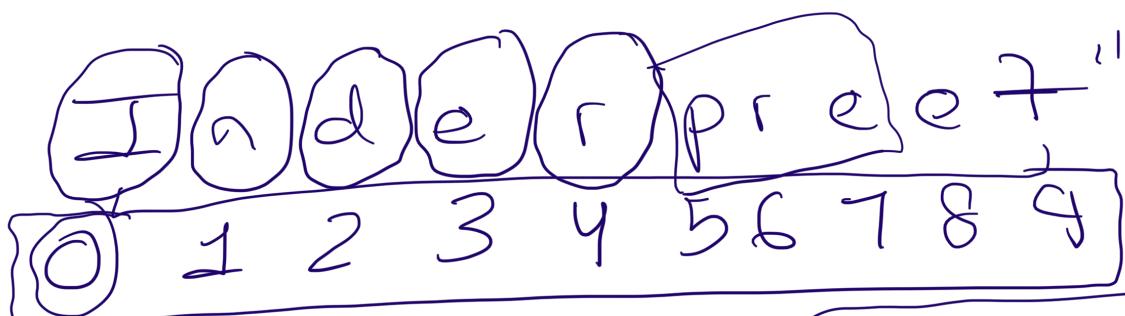
$\neq$

not equal

True

$$5! = 5$$

Name =



1. Strings are **Immutable**  
Unchangeable

2. Name[0] = 'I'

Slicing =   
 Original  
 Slicing  
 Part of original

name = "Interpreter"  
 0 1 2 3 4 5 6 7 8 9

name[0:3] 3 Inde

0 to 2  
 [0 : 3] 3

Name = "Interpreter"  
 0 1 2 3 4 5 6 7 8 9  
 ← R  
 ← R

10 - 9 - 8 - 7 + 6 - 5 4 - 3 - 2 - 1  
 [Inde] Preet  
 0 1 2 3 4 5 6 7 8 9

Name[: -5]

-9 -8 -7 -6 -5 -4 -3 -2 -1  
 Name = Venkatesh

Name[-5: -2]

Name = "Inde<sup>r</sup>"

[ 0 : 3 ]

O to 2